**ANALYSIS** 

This ordinance repeals those provisions of Title 29 - Mechanical Code of the

Los Angeles County Code, which had incorporated portions of the 2001 Edition of the

California Mechanical Code by reference and replaces them with provisions

incorporating portions of the 2007 California Mechanical Code, published by the

California Building Standards Commission, with certain changes and modifications.

Unless deleted or modified herein, the previously enacted provisions of Title 29 continue

in effect.

State law requires that the County's Mechanical Code contain the same

requirements as are contained in the building standards published in the California

Mechanical Code. State law allows the County to change or modify these requirements

only if it determines that such changes or modifications are reasonably necessary

because of local climatic, geological, or topographical conditions. The changes and

modifications to the requirements contained in the building standards published in the

2007 California Mechanical Code, which are contained in this ordinance, are based

upon express findings, contained in the ordinance, that such changes are reasonably

necessary due to local climatic, geological, or topographical conditions.

RAYMOND G. FORTNER, JR.

County Counsel

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MARK T. YANAI

Principal Deputy County Counsel

**Public Works Division** 

MTY:ia

7/17/07

(requested)

9/25/07

(revised)

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An ordinance amending Title 29 - Mechanical Code of the Los Angeles County Code, by adopting portions of the 2007 California Mechanical Code, by reference, with certain changes and modifications, and making other revisions thereto.

The Board of Supervisors of the County of Los Angeles ordains as follows:

**SECTION 1.** Section 108.1.1.1 through 108.1.1.15 of Chapter 1,

Chapters 2 through 14, Chapter 16 and Appendices A, B, C and D are hereby repealed.

**SECTION 2.** Chapter 1 is hereby amended to read as follows:

#### **CHAPTER 1**

### **ADMINISTRATION**

Part I -- GENERAL PROVISIONS

SECTION-100 -- CMC ADOPTION BY REFERENCE

Except as hereinafter changed or modified, Sections 108.1.1.1102 through 108.1.1.15114 of Chapter 1, Chapters 2 through 14, Chapter 16 and Appendices A, B, C and D of that certain Mechanical Code known and designated as the "2007 California Mechanical Code (CMC), 2001 Edition," as published by the California Building Standards Commission are adopted by reference and incorporated into this Title 29 of the Los Angeles County Code as if fully set forth below, and shall be known as Sections 108.1.1.1120 through 108.1.1.15132, respectively, of Chapter 1, Chapters 2 through 14, Chapter 16 and Appendices A, B, C and D of Title 29 of the Los Angeles County Code.

Except as hereinafter changed or modified, Chapters 2 through 17 and

Appendices A, B, C and D of that certain Mechanical Code known and designated as

the 2007 California Mechanical Code (CMC) as published by the California Building

Standards Commission are adopted by reference and incorporated into this Title 29 of

the Los Angeles County Code as if fully set forth below, and shall be known as

Chapters 2 through 17 and Appendices A, B, C and D of Title 29 of the Los Angeles

County Code.

A copy of the California Mechanical Code, including the above designated portions of such Appendices, shall be at all times maintained by the Chief Mechanical Inspector for use and examination by the public.

#### SECTION 101 -- TITLE

Title 29 of the Los Angeles County Code shall be known as the Los Angeles County Mechanical Code, may be cited as such, and will be referred to in this ordinance as "this Code."

# SECTION 102 -- PURPOSE AND INTENT

The purpose of this Code is to provide minimum standards to preserve the public health, safety and welfare by regulating the design, construction, installation, quality of materials, location, operation, and maintenance of heating, ventilating, comfort cooling, refrigeration systems, and other miscellaneous heat-producing appliances. Consistent with this purpose, the provisions of this Code are intended and always have been intended to confer a benefit on the community as a whole and are not intended to establish a duty of care toward any particular person.

# SECTION 103 -- SCOPE

The provisions of this Code shall apply to the erection, installation, alteration, repair, relocation, replacement, addition to, use, or maintenance of any heating, ventilating, comfort-cooling, refrigeration systems, incinerators or other miscellaneous heat-producing appliances.

# SECTION 104 -- CHIEF MECHANICAL INSPECTOR

The office of Chief Mechanical Inspector exists in the Building and Safety Division of the Department of Public Works. The Chief Mechanical Inspector shall administer the provisions of this Code under the supervision of and control of the Director of the Department of Public Works and shall be a competent mechanical engineer well versed in accepted mechanical engineering practices and techniques, construction and installation methods, and in the statutes of the State of California and the ordinances of the County of Los Angeles relating to heating, ventilating, comfort-cooling, refrigeration systems, and other miscellaneous heat-producing equipment.

# SECTION 105 -- USE OF TERMS

Whenever the term "Chief Mechanical Inspector," "Mechanical Inspector," "Administrative Authority Having Jurisdiction" or "Building Official" is used in this Code, other than in Section 104, such term shall be construed to mean the "Director of the Department of Public Works" of the County of Los Angeles or his authorized representative.

. . .

# SECTION 103 -- SCOPE

The provisions of this Code shall apply to the erection, installation, alteration, repair, relocation, replacement, addition to, use, or maintenance of any heating, ventilating, comfort-cooling, refrigeration systems, incinerators or other miscellaneous heat-producing appliances.

. .

#### SECTION 104 -- CHIEF MECHANICAL INSPECTOR

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#### SECTION 105 -- USE OF TERMS

Whenever the term "Chief Mechanical Inspector," "Mechanical Inspector," "Administrative Authority Having Jurisdiction" or "Building Official" is used in this Code, other than in Section 104, such term shall be construed to mean the "Director of the Department of Public Works" of the County of Los Angeles or his authorized representative.

# SECTION 106 -- EXISTING EQUIPMENT

Heating, ventilating, comfort-cooling, refrigeration systems, or other miscellaneous heat-producing appliances lawfully installed prior to the effective date of this Code may have their existing use, maintenance or repair continued if the use, maintenance or repair is in accordance with the original design and location and is not a hazard to life, health, or property.

All heating, ventilating, comfort-cooling, refrigeration systems, or other miscellaneous heat-producing appliances, both existing and new, and all parts thereof, shall be maintained in a safe and sanitary condition. All devices or safeguards which are required by this Code in heating, ventilation, comfort-cooling, refrigeration systems, or other miscellaneous heat-producing appliances when installed, altered, or repaired, shall be maintained in good working order.

The owner or his designated agent shall be responsible for the maintenance of heating, ventilating, comfort-cooling, refrigeration systems, or other miscellaneous heat-producing appliances.

SECTION-107 -- ALTERNATE MATERIALS AND METHODS OF CONSTRUCTION

SECTION 108 -- APPLICATION Reserved

108.1 [Reserved]

108.1.1 Sections 108.1.1.1 through 108.1.1.15 describe the state agencies that adopt building standards, the specific scope of application of the agency

responsible for enforcement, and the specific authority of each agency to adopt and enforce such building standards, unless otherwise stated.

SECTION-109 -- BOARD OF APPEALS

Part II --

ORGANIZATION AND ENFORCEMENT

SECTION-110 --

**DUTIES OF THE MECHANICAL INSPECTOR** 

Part III --

PERMITS AND INSPECTION

SECTION-111 --

**PERMITS** 

111.1

Permits Required.

No person shall install, alter, reconstruct or repair any heating, ventilating, comfort cooling, or refrigeration equipment unless a permit therefor has first been obtained from the Chief Mechanical Inspector.

A permit shall be obtained for all heating, ventilating, comfort-cooling, or refrigeration equipment, moved with, or installed in, any relocated building. A separate permit shall be obtained for the equipment installed in each separate building or structure. Permits are not transferable from one person to another or from one location to another.

No permit shall be required for the following:

- 3. Any portable comfort-cooling unit.
- 4. Any steam, hot, or chilled water piping within any comfort-heating or cooling equipment regulated by this Code.

SECTION-112 -- PLANS REQUIRED AND PLAN CHECK FEES

# 112.1 Plans Required.

The Administrative-Authority <u>Having Jurisdiction</u> may require the submission of plans, specifications, drawings, and such other information as he may deem necessary, prior to the commencement of and at any time during the progress of any work regulated by this Code.

The issuance of a permit upon plans and specifications shall not prevent the Administrative Authority Having Jurisdiction from thereafter requiring the correction of errors in said plans and specifications, or from preventing construction operations being carried on thereunder when in violation of this Code or of any other pertinent ordinance, or from revoking any certificate of approval when issued in error.

# 112.1.1 Direct-fired Gas Makeup and Industrial Air Heaters.

The installer shall submit plans showing the proposed installation, indicating the location of the heater and such accessories as may be required to ensure the proper and safe performance of its function.

# 112.2 Plan Check Fees.

A plan checking fee shall be paid to the Chief Mechanical Inspector at the time of submitting the plans and specifications for work <u>as</u> described in Section 112.1 above. Said fee shall be as follows:

1. For projects meeting the criteria established in subsection 112.1(1) aboverequiring a mechanical code plan check, the fee shall be equal to the greater of

either 50 percent of the required mechanical permit fee as set forth in Section 114 of this Code, or \$99.80.

**EXCEPTION:** Identical appliances of 100,000 BTU or less, installed in a single building:

Up to and including 10

50 percent of permit fee

For each appliance over 10

an additional 5 percent of its-permit fee

2. If any of the following systems is included in the work proposed, a surchargeWhen mechanical plan check is required and any of the following systems are included in the proposed work, a supplemental plan review fee, in addition to the fee specified in paragraph 1, above, shall be collected for each of these systems as follows:

The minimum plan checking fee shall be

\$91.80

- 23. For plan review of projects meeting the criteria established consisting of one or more systems specified in sub-subsection 112.2, 1. (i), (ii), (iii) or (iv) above and that do not require mechanical code plan check as specified in paragraph 1, above, the fee shall be \$200.30 for each system.
- 34. For tenant improvement installations requiring review to verify compliance with the State's Energy Regulations, when a building permit is not required for that work, the fee shall be \$21.40/1000 square feet (93 m²) of conditional conditioned space; provided, however, the minimum fee shall be \$43.30.

5. \_\_\_In addition to the aforementioned fees, the Chief Mechanical Inspector may require additional charges at the rate of \$86.70 per hour for reviews required by the complexity of plans, or revisions of approved plans and reports, or for services beyond the initial and second check when such additional work is due to changes, omissions or errors on the part of the plan check applicant. The payment of said charges shall not exempt any person from compliance with other provisions of this Code.

SECTION-113 -- VALIDITY AND LENGTH OF PERMIT

. . .

SECTION-114 -- PERMIT FEES

. . .

SECTION 115 -- INSPECTION

. . .

A final inspection approval may, upon notice, be revoked by the Building Official if he finds that the heating, ventilating, comfort cooling, or refrigeration equipment fails in any respect to comply with the requirements of this Code, or that the installation is unsafe, dangerous, or a hazard to life or property.

SECTION-116 -- REQUEST FOR INSPECTION

. . .

SECTION 117 -- ANNUAL REVIEW OF FEES

. . .

# SECTION-118 -- VIOLATIONS AND PENALTIES

It shall be unlawful for any person, firm, or corporation to erect, install, alter, repair, relocate, add to, replace, use or maintain heating, ventilating, comfort-cooling, or refrigeration equipment in the jurisdiction, or cause the same to be done, contrary to or in violation of any of the provisions of this Code. Maintenance of equipment which was unlawful at the time it was installed, and which would be unlawful under this Code if installed after the effective date of this Code, shall constitute a continuing violation of this Code.

# 119 -- APPLICATION OF STATE AGENCIES

Following is a list of the state agencies that adopt building standards, the specific scope of application of the agency responsible for enforcement, and the specific statutory authority of each agency to adopt and enforce such building standards, unless otherwise stated.

SECTION 3.

Chapter 2 is hereby amended to read as follows:

**CHAPTER 2** 

**DEFINITIONS** 

204 -B--

. .

BUILDING CODE -- The building code that is adopted by this jurisdiction.

[HCD1, HCD 2, and SFM] "Building Code" shall mean the California Building Code, Title

24, Part 2. [OSHPD 1, 2, 3 & 4] For the purpose of the California Mechanical Code,

"Building Code" shall be the most recent edition of the California Building Code. Is the

most recent edition of Title 26 of the Los Angeles County Code.

207 -E--

Pational Fire Protection Association, as adopted by this jurisdiction. [HCD 1 and HCD 2] Whenever the term "Electrical Code" is used in this code, it shall mean the California Electrical Code, Title 24, Part 3. Is the most recent edition of Title 27 of the Los Angeles County Code.

218 -P--

PLUMBING CODE -- The Uniform Plumbing Code promulgated by the International Association of Plumbing and Mechanical Officials, as adopted by this jurisdiction. [HCD 1 and HCD 2] Whenever the term "Plumbing Code" is used in this code, it shall mean the California Plumbing Code, Titel 24, Part 5. Is the most recent edition of Title 28 of the Los Angeles County Code.

SECTION 4.

Chapter 5 is hereby amended to read as follows:

### **CHAPTER 5**

# **EXHAUST SYSTEMS**

501.0

Scope.

This chapter includes requirements for environmental air ducts, product conveying systems, and commercial hoods and kitchen ventilation. Ventilation systems installed to control occupational health hazards shall comply with the requirements of the health officer.

. . .

508.0

Hoods.

. . .

508.4

Hood Size.

508.4.1

Canopy Size and Location.

. . .

508.4.1.5

Type I hoods where the cooking equipment includes low-

temperature appliances such as medium-to-low temperature ranges, roasters, roasting

ovens, pastry ovens, pizza ovens and equipment approved for use under a Type II

hood, such as pizza ovens:

510.0

**Exhaust Duct Systems.** 

510.1

General.

510.1.7 Duct bracing and supports shall be of noncombustible material, securely attached to the structure, not less than the gauge required for grease duct construction and designed to carry gravity and lateral loads within the stress limitations of the Building Code. Bolts, screws, rivets, and other mechanical fasteners shall not penetrate duct walls.

SECTION 5.

. . .

. . .

Chapter 11 is hereby amended to read as follows:

# **CHAPTER 11**

### REFRIGERATION

1119.0 Special Discharge Requirements.

1119.3 Testing.

1119.4. Approvals Required.

The method of discharge of systems containing other than group A1 refrigerants shall comply with the pertinent requirements of Title 32-Fire Code and Division 2 of Title 20-Sanitary Sewer and Industrial Waste of the Los Angeles County Code. Where applicable, Section 1120 may be used with prior approval of Authority Having Jurisdiction.

12

TABLE 11-1 -- REFRIGERENTGROUPS<sup>1</sup>, PROPERTIES<sup>2</sup> AND ALLOWABLE QUANTITES<sup>3</sup>

REFRIG- ERANT	CHEMICAL FORMULA	CHEMICAL NAME <sup>4</sup> (Composition for Blends)	SAFETY GROUP <sup>1</sup>	PEL⁵ (ppm)	IDLH <sup>6</sup> (ppm)	POUNDS PER 1,000 CF OF SPACE <sup>7</sup>
R-11	CCI₃F	Trichlorofluoromethane	A1	C1000 <sup>8</sup>	4,00010	1.60
R-113	CCI <sub>2</sub> FCCIF <sub>2</sub>	1,1,2-Trichloro-1,2,2- Trifluoroethane	A1	1,000	4,500 <u>4,000</u>	1.90
R-114	CCIF2CCIF2	1,2-Dichloro-1,1,2,2- tetrafluoroethane	A1	1,000	<del>50,000</del> <u>21,000</u>	9.40
R-123	CHCl <sub>2</sub> -CF <sub>3</sub>	2,2-Dichloro-1,1,1- Trifluoroethane	B1	50	4,,000 <sup>11</sup> 1.000	<del>1.60</del> <u>0.40</u>
R-124	CHCIFCF3	1,2-Chloro-1,1,1,2- tetrafluoroethane	A1		an se	
R-134a	CF <sub>3</sub> CH₂F	1,1,1,2-Tetrafluoroethane	A1	1,00010	50,000 <sup>11</sup> 60,000	16.00
R-245fa	CF <sub>3</sub> CH <sub>2</sub> CHF <sub>2</sub>	1,1,1,3,3-pentafluoropropane	A3 <u>B-1</u>	300		
R-1270	CH <sub>3</sub> CH=CH <sub>2</sub>	Propene (propylene)	B3 <u>A3</u>	660	3,400	0.37

SECTION 6. The provisions of this ordinance contain various changes, modifications and additions to the 2007 Edition of the California Mechanical Code.

Some of these changes are administrative in nature in that they do not constitute changes or modifications to requirements contained in the building standards published in the California Building Standards Code.

Pursuant to California Health and Safety Code sections 17958.5, 17958.7 and 18941.5, the Board of Supervisors hereby expressly finds that all of the changes and modifications to requirements contained in the building standards published in the California Building Standards Code, contained in this ordinance, which are not

administrative in nature, are reasonably necessary because of local climatic, geological or topographical conditions in the County of Los Angeles as more particularly described in the table set forth below.

# MECHANICAL CODE AMENDMENTS

CODE SECTION	CONDITION	EXPLANATION		
501	Climatic	Additional Health Department requirements are necessary due to local air quality concerns.		
510.1.7	Geological	To reduce damage during a seismic event		
1119.4	Geological	To reduce the potential for release of toxic refrigerant caused by shifting equipment during a seismic event		
Table 11-1	Geological	To reduce the potential for release of toxic refrigerant caused by shifting equipment during a seismic event. Change based on ASHRAE's latest allowable concentration of refrigerant		

**SECTION 7.** This ordinance shall become operative on January 1, 2008.

[Title29MechanicalMTYCC]